PROCEDURE C-11-1
(formerly referenced by 14-13)

Procedures for the Handling and Disposal of Selected Wastes from Retail Motor Vehicle Servicing Facilities

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Introduction

This document was prepared in cooperation with the Ontario Petroleum Association (OPA) and Automotive Afteruse Retailers of Ontario (AARO) to promote the proper management of liquid wastes generated from retail motor vehicle servicing facilities (including retail gasoline service stations, retail automotive repair garages, retail car washes, and retail service centres at automobile dealerships).

The document includes recommended operating practices for facilities at service stations (servicing facilities) from which these liquids are removed for disposal. It also stresses the need to ensure proper waste disposal by using carriers and disposal facilities approved by the Ontario Ministry of Environment and Energy (MOEE).

The service station operator has a responsibility to ensure that his wastes are handled and disposed of with proper care. In order to be exempt from manifest and registration requirements, the service station operator must have a current written agreement for the collection and management of his wastes with a carrier approved under Part V of the *Environmental Protection Act* for the operation of a waste management system. Failure to have such an agreement would result in the loss of this exemption, leading to requirements for generator registration and the use of manifests for these wastes. The service station operator **must** at all times have this agreement available for inspection by an Ontario Ministry of Environment and Energy inspector.

The agreement between the service station and the carrier must include the following information:

Service Station

- service station name,
- company affiliation, if applicable,
- site location, full address,
- full mailing address, if it differs from the site location,
- operator's full name.

Carrier

- carrier's name,
- full address,
- waste management system Certificate of Approval number,
- name of primary contact person.

Other Information

- length of time agreement in effect,
- wastes covered by agreement,
- minimum time intervals between pick-ups to match those in this guideline,
- intended receiver of waste(s), including full site address and Certificate of Approval number.

Recommended Practices for Used Lubricating Oil

1. All used oil generated at the station must be stored in a tank specifically designed and used exclusively for that purpose. Disposal of non-petroleum products into the used oil storage tank is not an acceptable practice.

2. The used oil storage tank should be tightly and securely capped and water content minimized.

3. The service station operator should arrange for pick-up of used oil as necessary with a used oil carrier approved by the Ontario Ministry of Environment and Energy.

4. The service station operator is responsible for ensuring that the used oil is sent to a waste management facility approved by the Ontario Ministry of Environment and Energy to accept this class of waste. As a general practice, the Ministry and the petroleum industry encourage operators to send used oil from service stations to re-refining facilities for the protection of the environment and conservation of resources.

5. Used oil must not be used in combustion systems unless specific approval to do so is given by the Ontario Ministry of Environment and Energy under Section 9 of the *Environmental Protection Act*.

6. The operator must prevent the entry of oil into sewer systems, drains and the natural environment.

7. Spills or other discharges to the environment must be reported immediately to the Ministry, to the municipality, and where appropriate, to the service station operator's

company affiliate.

SERVICE STATION INTERCEPTORS

Service stations are normally equipped with interceptors (oil-water separators). Interceptors receive all service bay drainage and retain the oily (hydrocarbon) wastes and solids. This is a gravity separation system with oil and grease (hydrocarbons) rising, and solids settling as a sludge. Oily water (effluent) passes through several compartments, repeating the oil/water separation process. The water phase ultimately passes to municipal sanitary sewers or to a septic system in a rural setting. Discharge of water from the interceptor to an open ditch, ground or waterway requires prior approval under Section 53 of the *Ontario Water Resources Act*. Properly designed and maintained, interceptors can provide up to 98% removal of oil and solids from the original mixture.

Routine Inspection:

Routine inspection by the service station operator can vary with the amount and type of service bay activity but should be undertaken **at least** once every three months. The following procedures are recommended:

1. Measure the amount of accumulated oil and solids in the first compartment to determine if a clean-out is required.

2. Inspect the last compartment to ensure that the water being directed to municipal sewers does not contain solids or oils and greases (hydrocarbons).

Management Criteria:

1. Servicing and clean-out of the separator is required when the oil collected reaches a level of 10 cm. (4 inches) or if the solids at the bottom reach a depth of 30 cm. (12 inches).

2. Servicing is also required promptly following any spill that results in a significant quantity of contaminants entering the interceptor.

3. The interval between interceptor clean-outs should never exceed 12 months, regardless of the amounts of oil or solids collected.

Recommended Servicing Procedures:

1. Clean-out should be carried out by an Ontario Ministry of Environment and Energy approved carrier using a power vacuum unit.

2. Clean-out is accomplished by applying suction near the top of the oil layer in the first compartment until it is completely removed, then proceeding directly to the sludge layer and removing same.

3. The intermediate water layer is left (or should be replaced) to act as a seal.

4. The other chamber(s) should also be checked to ensure no significant quantity of oil or sludge is present.

5. The interceptor should be inspected by the operator immediately after servicing to ensure that it has been properly cleaned and that the water level has been restored for operation.

6. The service station operator is responsible for ensuring that the waste - both oil and solids - which is removed from his interceptor, is taken to a waste management facility approved by the Ministry to handle this class of wastes. Such facilities would include, but are not limited to, waste oil processors/recyclers, waste transfer stations and sewage treatment plants. Operators should ensure that wastes taken to sewage treatment plants comply with all municipal sewer use by-laws.

Recommended Operating Procedures:

1. Compartment covers must be tightly sealed to ensure that all floor drainage is directed to the first compartment.

2. Water must be maintained at normal operating levels to retain the seal and prevent oil from leaving the first compartment.

3. No changes can be made to the piping or baffles in the interceptor except as approved by the manufacturer or a design engineer.

4. No gasoline, gasoline contaminated products, cleaning solvents, anti-freeze, windshield washing fluids or wastewaters containing surfactants from exterior washing of vehicles should be intentionally sent to the interceptor.

Records:

Records must be kept on the particulars and dates of inspections, clean outs and spills.

WATER PUMP OUT FROM UNDERGROUND GASOLINE STORAGE TANKS

The *Ontario Gasoline Handling Act* requires that service station operators dip their underground product storage tanks for accumulated water content on a daily basis.

The presence of water in a tank can occur from

- condensation of water vapour,
- surface water run-off entering the fill-pipe.

Operator Requirements:

1. Service station operators must dip all underground storage tanks for water on a daily basis.

2. If water is detected in any underground tank to a depth of 5 cm. or more, the operator should contact his supplying company and report water content.

3. The services of an approved petroleum equipment maintenance contractor should be engaged to pump out the water contaminant.

4. Small quantities of contaminated water (up to 100 litres) may be placed in the used-oil storage tank. This practice should be minimized in keeping with the recommendations for used oil and to minimize the potential for flashing as a result of excessive gasoline content in the used oil storage tank.

5. Quantities in excess of 100 litres will be collected in tanks or drums and transported to a marketing terminal or refinery for treatment in a gravity separator followed by a conventional secondary biological treatment plant.

6. In the event that a terminal or refinery facility does not exist in the area, contaminated water must be taken to an approved waste management facility such as a sewage treatment plant for treatment or destruction. The service station operator is responsible for ensuring that the chosen waste management facility has the necessary Certificate of Approval enabling it to handle this class of waste and that

the facility has agreed to accept the waste.

7. Contaminated water from underground storage tanks must **NOT** be discharged into the station oil-water interceptor, nor to the storm sewer. The contaminated water may not be sent to a sanitary sewer unless it meets the specifications in the municipal sewer use by-laws and any other applicable municipal requirements.

8. It is a primary requirement that service station operators will maintain the fill-box and fill-cap on all underground storage tanks to minimize water contamination from surface run-off.

RECOMMENDED PRACTICE FOR THE DISPOSAL OF WASTE BATTERIES

The following practices are recommended for the disposal of waste batteries:

1. Waste batteries must be handled by a waste battery reclaiming facility approved by the Ontario Ministry.

2. Precautions should be taken to ensure that leakage does not occur from batteries that are stored on-site, pending disposal. Storage areas should be curbed or otherwise designed to retain any acid that may leak.